October 23, 2006

Mr. James F. Kohler, Chief, Solid Minerals Branch United States Department of the Interior Bureau of Land Management Utah State Office P.O. Box 45155 Salt Lake City, UT 84145-0155

Re: Exploration Plan on Federal Gilsonite Lease UTU-060749

Dear Mr. Kohler:

Please find attached the revised exploration plan for Federal Gilsonite Lease UTU-060749. If you require any additional information please do not hesitate to contact me.

Best regards,

Jared Jackson
Production Manager
American Gilsonite Co.

Cc: Pete Sokolosky – Vernal Field Office

#### UTU-060749

#### October 23, 2006

Exploration Plan for American Gilsonite Co. on Lease UTU-060749

### Description of the Area

T9S, R24E, SLM, Utah Sec. 35

### **Ownership**

American Gilsonite Company 29950 So. Bonanza Hwy Bonanza, UT 84008 Phone: 435-789-1921

Fax: 435-789-1956

Jared Jackson is the Production Manager and is the responsible person for notices and orders for Federal Lease UTU-060749.

#### <u>Maps</u>

See Attachments

## **Vegetative Cover**

Vegetation in the lease area consists of mixed desert shrub types, such as shadscale, budsage, big sagebrush, rabbitbrush, black sagebrush, winterfat and minor amount of cactus. Common grasses are: Galleta, Indian Ricegrass, SquirrItail, Western Wheatgrass, sand dropseed, blue grama and needle and thread. Forbs are generally Scarlet Globemallow and Longleaf Phlox. There are no known threatened or endangered plant species in the lease area.

## Climate and air quality

Climate can be described as "High Desert", with an average annual precipitation of approximately 10 inches. Summers are extremely hot and dry with occasional short local downpours from thunderstorms. July temperatures average near 70 degrees F. with a 107 degree F. maximum and, as is typical of deserts, temperatures have a wide diurnal range. By contrast, the January average temperature is about 14 degrees F. and a minimum as low as -40 degrees F., in general the winters are cold and dry with little snow.

Air quality is sometimes impacted by windborne dust and soil as is common in the arid desert environment. Due to the size and nature of the operation, no adverse or significant impact to air quality is expected.

### Indigenous wildlife

There are no known endangered species inhabiting the lease area. Animals that have been seen transiting the area are prairie dogs, rabbit, deer, pronghorn antelope, coyote and various species of mice. No wild horses are known to inhabit the area. Raptor species prevalent to the area are golden eagle, prairie falcon and the red tailed hawk, but no known aeries are located on or near the lease.

### Past and present land use

Past and present use of the area has been mining Gilsonite, oil and gas exploration and grazing.

## **Surface Waters**

The lease has no perennial drainages, there are small ephemeral washes. As the annual average rainfall and the footprint of the drilling stations are very small, no erosion control measures are anticipated.

### **Ground Water / Water Use**

If ground water is encountered and brought to the surface during drilling, the Authorized Officer (AO) will be notified to determine the sampling and testing requirements for the water. Materials used during drilling will be non-toxic to not contribute to ground water pollution (we typically use EZ-Mud brand drilling fluid and Quick Gel (Bentonite Clay) manufactured by Baroid Drilling Fluids). No unauthorized dumping or surface discharge of drilling fluids will occur.

Any water used during exploration will be supplied under AGC's water right number, 49-222. The amount of water needed will depend on the conditions encountered during drilling.

# Soils and subsoils

The soil in this lease area has been classified as 100% Walknolls-Gilston association in the *Soil Survey of Uintah Area*, Utah - Parts of Daggett, Grand and Uintah Counties<sup>1</sup> by the USDA Natural Resources Conservation Service. This survey states that the soil in the lease area consists of 55% Walknolls and similar soils, 35% Gilston and similar soils and 10% minor components. The parent material for Walknolls soils is listed as slope alluvium from sandstone. The typical profile for Walknolls soils is: A - 0 to 3 inches; very channery loam, Bk1 - 3 to 7 inches; very channery loam, Bk2 - 7 to 16 inches;

extremely channery sandy loam, R-16 to 20 inches; unweathered bedrock. The parent material for Gilston soils is listed as alluvium derived from sandstone. The typical profile for Gilston soils is: A-0 to 4 inches; sandy loam, Bk-4 to 52 inches; gravelly sandy loam, Bkny-52 to 68 inches, gypsiferous loam.

### Access to the site

The drilling stations are accessed by turning west off of State Route 45 onto the dirt road that accesses the WH-4 mine (see attached topographical map). No improvements are anticipated to the roads within or outside of the lease boundaries.

## Geology

Geologically, the area consists of interbedded sandstones and bentonitic clays of the Uinta formation. Gilsonite occurs in parallel, near vertical fractures in the Uinta Formation. The Gilsonite bearing fractures often outcrop and can go up to 2,000 feet in depth and be as long as 22 miles varying in width from a few inches to 22 feet.

## **General Exploration Startup**

Drilling will be accomplished utilizing a truck mounted core drill rig. This rig will be transported to the site and left on the lease until exploration is completed. Collar elevation will be approximately 5,500 feet ASL. Portable stock tanks will be used for storage of drilling muds or foam. Necessary water for the drilling operation will be hauled to the site in a portable water tank. A pit, approximately 4' wide x 12' long x 4' deep, will be excavated on the downhill side of the site for deposition of the cuttings. Topsoil will be stockpiled. Upon completion, the topsoil will be re-deposited and the pit graded to approximate original contour.

Other equipment that will be accessing the site includes: pickup trucks to transport personnel to and from the site each day, portable water tank to supply water to the drilling rig as needed and backhoe and/or grader to aid in reclamation after drilling is completed.

Drilling will occur either on existing roadways, or within a 75' radius of the WH-4 shaft so that no additional surface disturbance will be required.

## **Exploration Plan**

There will be one drilling station located as follows: Station #1 – 39 degrees, 59.732 minutes north / 109 degrees, 11.208 minutes west. This location was chosen because it allows us to drill under the existing WH-4 shaft and it is on an existing road under a current mining plan approval. The drill station will be located at an approximately 90 foot offset perpendicular to the strike of the vein on the south, or down dip side of the vein. Should conditions prove unfavorable to drilling from the south side of the vein, we will drill from the north side of the vein at a similar offset. There will be two to four 3"

diameter inclined holes drilled from each station. The holes will be drilled on 82, 81, 79 and 77 degree angles, measured from the horizontal plane (see Figure 1). The holes are anticipated to intersect the vein at approximate depths of 500', 450', 400' and 350', respectively (below the drill hole collar elevation). The collars will be offset approximately 2' from each other to avoid interference. Should conditions arise that prevent the successful completion of any drill hole, a new drill hole will be attempted in the vicinity of the failed drill hole. If any additional drilling is desired (based on the information obtained from these two drilling stations), a modification to this exploration plan would be submitted to the AO for approval.

### **Control Measures**

All employees are trained in first aid and fire control. An appropriate number of ABC fire extinguishers will be provided (these are typically 20 lb units). All mobile equipment has fire extinguishers mounted on them and employees receive training on the proper use of them.

There are no fish on or nearby the lease and wildlife avoids the drilling areas, so no problems are foreseen. No harassing or shooting of wildlife would be allowed, as would unnecessary off road driving. Drilling personnel will be instructed to maintain a clean and neat work place. Trash will be brought to Bonanza and disposed of in dumpsters that are regularly picked up by a waste disposal company.

## **Reclamation plans**

Upon completion of drilling, all equipment will be removed. Cuttings will be transferred into the holes and the top 5'-10' of the holes will be filled with concrete. If water is encountered in a hole, the hole will either be filled in entirely with concrete, or the AO will be contacted for plugging recommendations. The holes will be plugged within 45 days after drilling is completed, and the AO will be contacted before the plugging is performed. The area will be graded to approximate original contour. As there will be no new surface disturbances, the area will be reclaimed with the rest of the WH-4 site after mining is completed in the area. Please refer to the approved mine plan for this lease for reclamation details.

Because of the small footprint of the drill stations, the environmental aspects or impacts are extremely small or non-existent. Of the 12 critical elements of the environment, six areas of critical environmental concern (prime or unique farmlands, floodplains, wetlands/riparian zones, wild and scenic rivers, and wilderness areas) do not occur in the vicinity of the lease. Of the remaining six critical elements of environmental concern, cultural remains and Native American religious concerns would not be affected because there are none in the vicinity, and tow (air quality and water quality) would not be affected because of the nature of the project. The last two concerns are moot (T&E species and hazardous and solid waste) as there are none in the vicinity and hazardous waste will not be generated or used and all solid waste is disposed of according to our Environmental Management program.

## Cultural, Archaeological, and Paleontological Features

All persons associated with this project will be informed that they are subject to prosecution for knowingly disturbing historic or archaeological sites or collecting artifacts. If historic or archaeological materials are uncovered, work would stop immediately and the BLM AO would be contacted.

## **Other**

Hazardous materials will not be used. Less than 10,000 lb, of any chemical(s) from the EPA's Consolidated of Chemicals Subject to Reporting Under Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1976 and less than the <a href="https://example.com/Threshold-Planning Quantity">https://example.com/Threshold-Planning Quantity (TPQ)</a>) of any extremely hazardous substances as defined in 40 CFR 355 will be used, produced, transported, stored or disposed of annually in association with the proposed mining operation.

The existing approved mine plan and lease stipulations will be followed.

Drilling will commence as soon as possible after approval (subject to equipment availability) and is expected to last approximately 2 - 4 weeks in duration.

The drilling data will be submitted to the AO within 30 days after drilling is completed.

# **Bibliography**

 Soil Survey of Uintah Area, Utah – Parts of Daggett, Grand and Uintah Counties, United States Department of Agriculture (USDA), Natural Resources Conservation Service – Garth W. Leishman, Robert H. Fish and Randy J. Lewis, 1997.